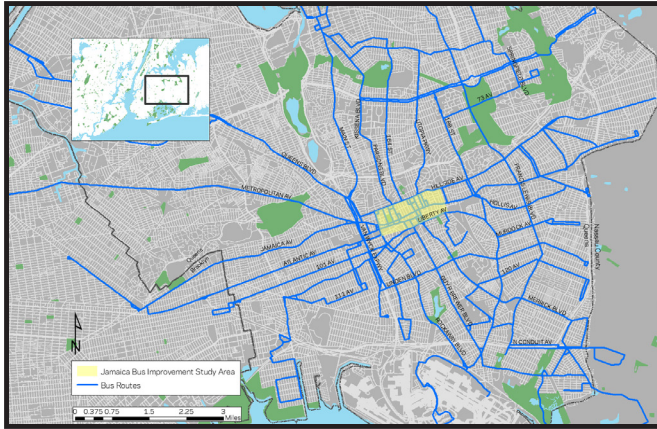


Study Background



- 47 NYCT, MTA Bus and LI Bus routes – hub for services throughout SE Queens
- Very high volume of bus to subway transfers
- **E F J Z** subway service

Study goals

- Improve bus travel within Jamaica
- Improve connections to subway and rail stations
- Balance bus travel with pedestrian and vehicle traffic

Study Progress

- ✓ Data Collection & Bus Passenger Survey
- ✓ Initial Community Input
- ✓ Existing Conditions Evaluation
- ✓ Bus Use Forecasting and Issues ID
- ✓ Develop Preliminary Recommendations
- Evaluate Preliminary Recommendations
- Community Input and Review
- Implement Desired Recommendations



What We Learned

Field Observations



Many misaligned intersections and complex street geometry



Many narrow streets with heavy bus and local traffic



Existing bus lane markings are difficult to see and in poor condition

Community Outreach

Community Advisory Committee meetings (September 2009 and April 2011)

Bus passenger survey (Fall 2009)

Findings:

Bus Operations:

- Undesirable bus layovers
- Lack of passenger amenities at bus stops
- Frequent bus bunching
- Long waits for certain bus routes

Traffic:

- Turns add to congestion
- Traffic diversions to side streets
- Confusing signage and lane markings
- Insufficient enforcement of parking and at busy intersections

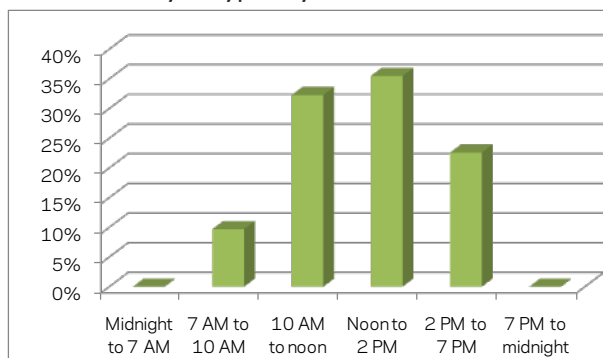


Business Outreach

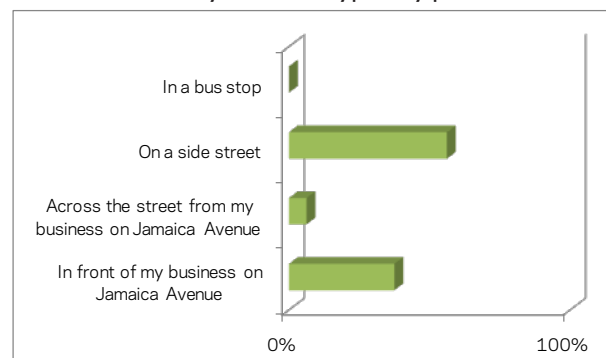
Survey of Jamaica Avenue merchants (May 2011) in coordination with the Jamaica Center Business Improvement District

Business owners interviewed to better understand impact of bus lane improvements on Jamaica Avenue

What time do you typically receive deliver-



Where do delivery vehicles typically park?

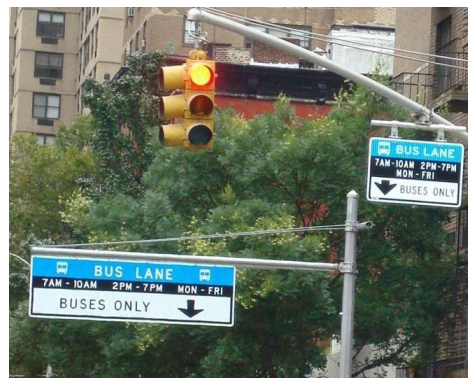


Bus Lanes in New York City

Bus Lane Elements

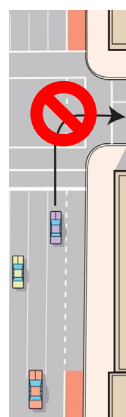
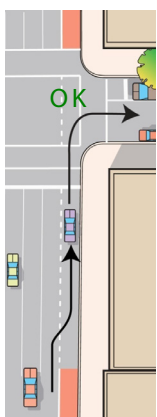


Improved markings and terra cotta paint



Large, easy-to-read sign show bus lane and parking/delivery hours

Bus Lane Rules



When the bus lane is in effect, stay out of the lane except to:

- Turn right at the next corner
- Quickly drop off or pick up passengers

Types of Bus Lanes



Offset bus lane

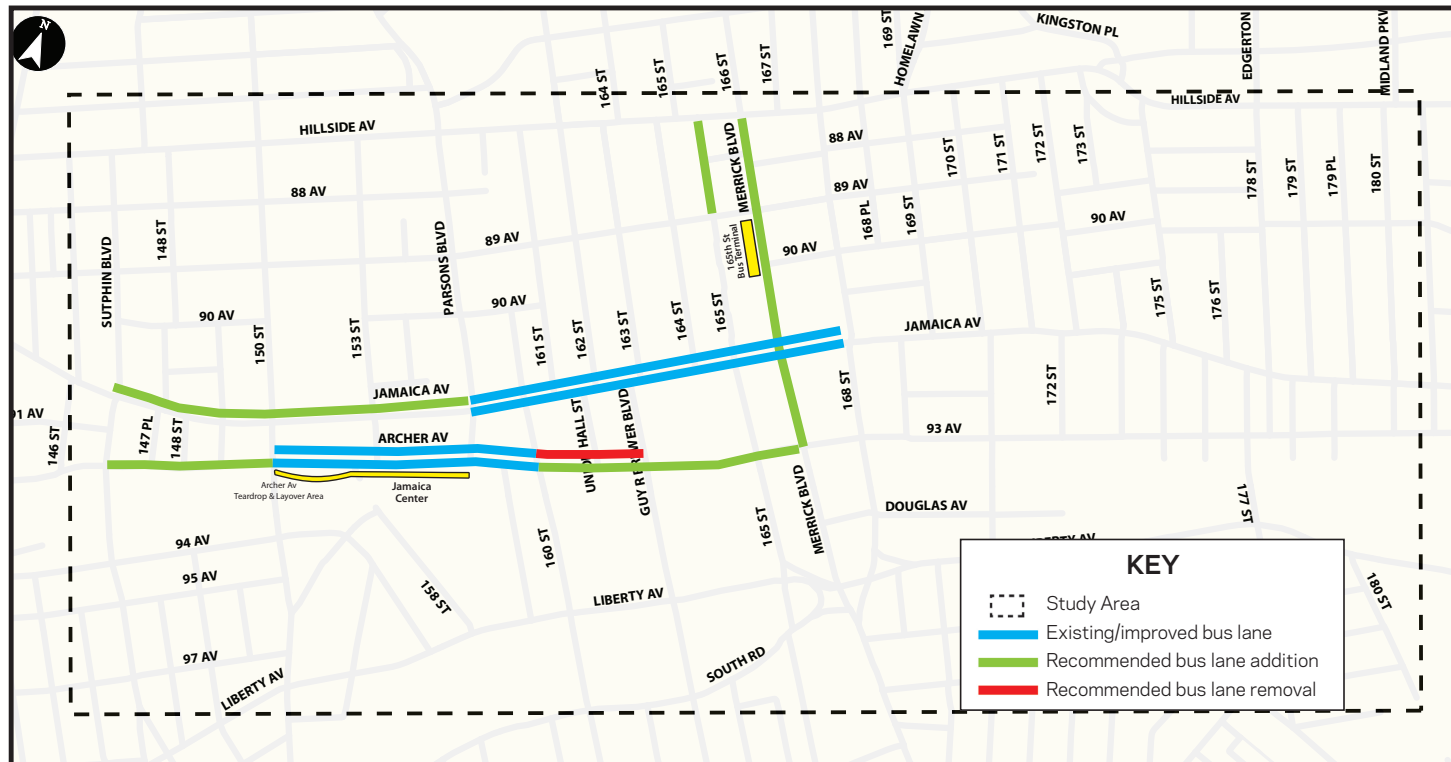
- One lane out from the curb
- Parking/loading/bus stops remain at the curb

Curbside bus lane

- Buses only, during posted time periods
- Metered parking, truck loading at other times

Livingston Street, Downtown Brooklyn

Proposed Bus Lanes



Bus lane features:

- Combination of offset and curbside bus lanes, improved with red lane markings and overhead signage
- Bus lane hours to be determined
- Midday loading windows will be implemented where needed

Bus lane length:

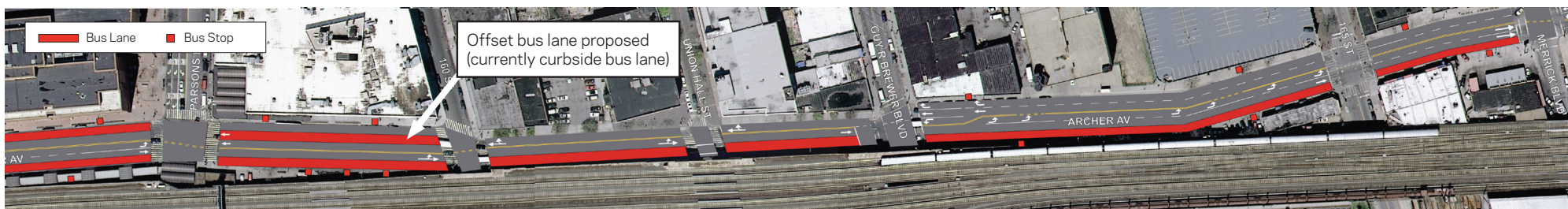
Existing Bus Lanes	1.6 miles
Proposed Bus Lane Additions	1.4 miles
Proposed Bus Lane Removal	0.1 miles
New Total	2.9 miles

Bus Lanes - Archer Avenue

Archer Avenue: Sutphin Boulevard to Parsons Boulevard

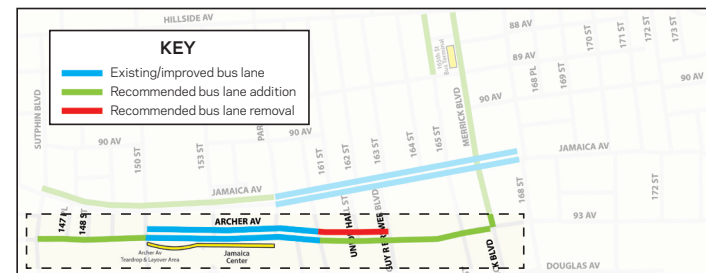


Archer Avenue: Parsons Boulevard to Merrick Boulevard



Benefits of bus lane improvements:

- Benefits 1,100 to 1,300 buses per direction daily
- Faster, more reliable bus service
- Improves eastbound bus and vehicle flow

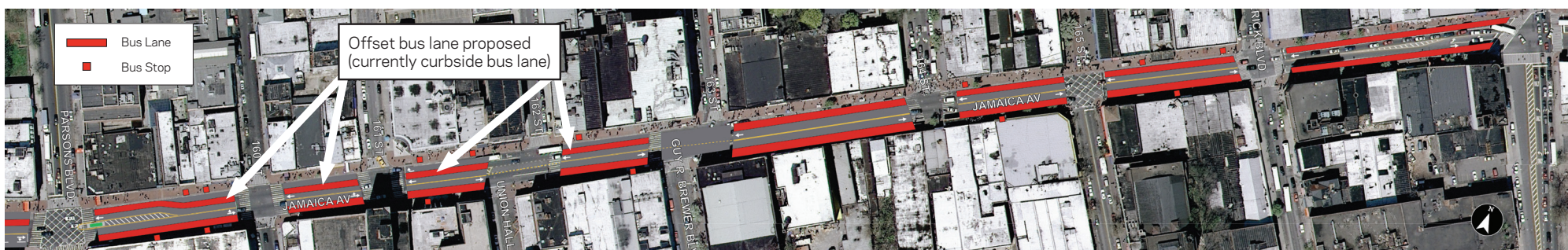


Bus Lanes - Jamaica Avenue

Jamaica Avenue: Sutphin Boulevard to Parsons Boulevard

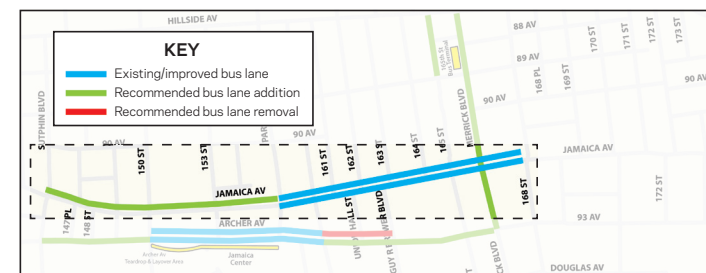


Jamaica Avenue: Parsons Boulevard to 168th Street



Benefits of bus lane improvements:

- Benefits 600 to 750 buses per direction daily
- Faster, more reliable bus service
- Offset lanes provide access to curb for parking and deliveries
- Reduces congestion by removing bus from general traffic



Bus Lanes - Merrick Boulevard & 165th Street

Merrick Boulevard: Archer Avenue to Hillside Avenue



165th Street: 89th Avenue to Hillside Avenue



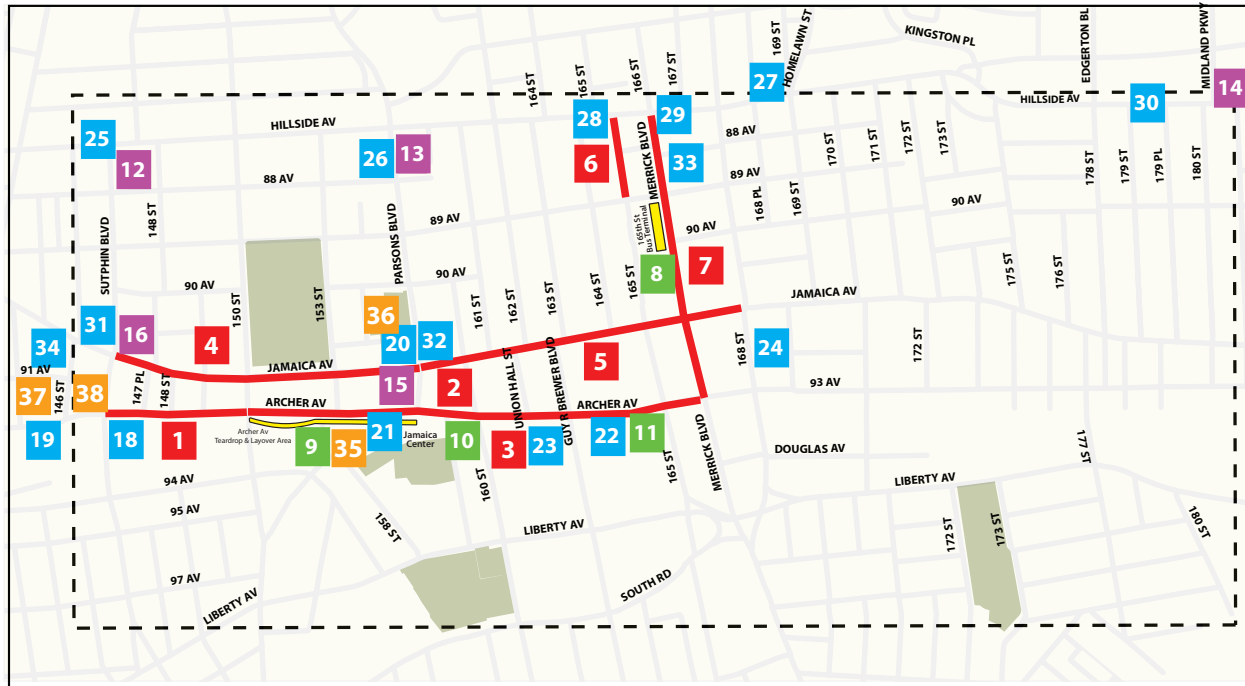
Photo:
Merrick Boulevard
near 165th Street
Bus Terminal

Benefits of bus lane improvements:

- Faster, more reliable bus service
- Reduces congestion by removing bus from general traffic
- Helps buses quickly enter and exit 165th Street Bus Terminal



Jamaica Recommendations



Study Area

Bus Lane Recommendations

- 1 Extend existing EB bus lane east to Sutphin Blvd and west to Merrick Blvd
- 2 Implement WB bus lane - curbside between Parsons Blvd & 150th St; offset between Parsons Blvd & 160th St with flexible delineators
- 3 Redistribute road width between 160th Street & Guy R. Brewer Blvd
- 4 Extend existing WB curbside bus lane west to Sutphin Blvd; offset between Parsons Blvd & Guy R. Brewer Blvd
- 5 Maintain existing EB curbside bus lane with highly visible paint and improved pavement markings
- 6 Implement NB interior bus lane between Hillside Av & 89th Av
- 7 Implement SB bus lane between Hillside Av & Archer Av

Facilitating Transfers Recommendations

- 9 Install shelter; passenger amenities in tunnel
- 10 Install cantilevered canopy & additional amenities
- 11 Install shelter and information panels

Bus Stop & Routing Recommendations

- 12 Lengthen & separate Q20A/B, Q43, Q44 bus stop
- 13 Relocate bus stops & layover areas
- 14 Relocate WB Long Island Bus stop
- 15 Modify bus stops near intersection
- 16 Extend NB Q20A/B, Q43, Q44 bus stop

Site Specific Recommendations

- 18 Prohibit EB-RT, WB-RT, EB-LT except for buses; install ASTC; extend pedestrian refuge
- 19 Implement "No Stopping Anytime"; move center line north on Archer Av west of Sutphin Blvd
- 20 Adjust signal timing; install signage; install ASTC; install curb extension at NW corner

- 21 Restripe Archer Av between Parsons Blvd & 153rd St
- 22 Restripe Archer Av between Guy R. Brewer Blvd & 165th St
- 23 Recess EB stop bar; improve LIRR underpass lighting; install amenities in tunnel
- 24 Reconfigure 168th St between Jamaica Av & Archer Av
- 25 Adjust signal timing
- 26 Restripe Parsons Blvd between Hillside Av & 88th Av; recess NB stop bar
- 27 Reconfigure 169th St & Home Lawn St at Hillside Av
- 28 Adjust Signal Timing
- 29 Adjust Signal Timing
- 30 New shelters on Hillside Av near 179th St & 179th Pl
- 31 Implement exclusive NB-RT; ban EB- and WB-RTs except for buses; improve drainage; install new shelter; install peg-a-tracks along Sutphin Blvd; shift northern end of western crosswalk west
- 32 Remove phonebanks at the intersection; prohibit EB- and WB-RTs except for buses
- 33 "No Standing Anytime Bus Layover Area" on Merrick Blvd and 89th Av; adjust signal timing; install curb extension
- 34 Extend bus layover area on 146th St; truck loading on east side of 146th St; 91st Ave between 146th St & 144th Pl one-way WB to allow truck loading

Livery Car/Commuter Van/Placard Parking Recommendations

- 35 Commuter van pick-up location in 158th St tunnel
- 36 Commuter van pick-up/drop-off along Parsons Blvd
- 37 Livery car pick-up/drop-off on 91st Av
- 38 Livery car pick-up/drop-off on Sutphin Blvd

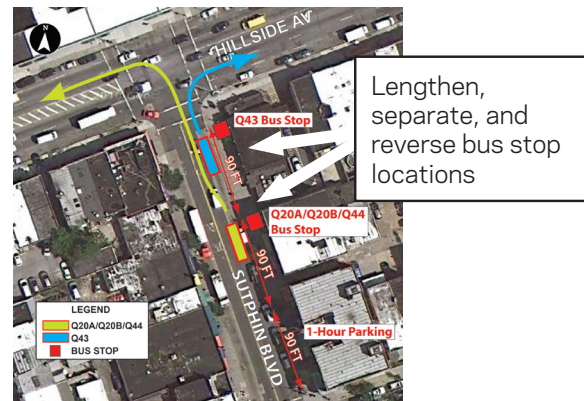
Other Recommended Improvements

Bus Stop Re-Configurations

Existing



Recommended



Parking Regulation Changes

Proposed



- Legalize existing daytime truck loading
- Provide additional truck loading space
- Extend one-way westbound operation on 91st Avenue

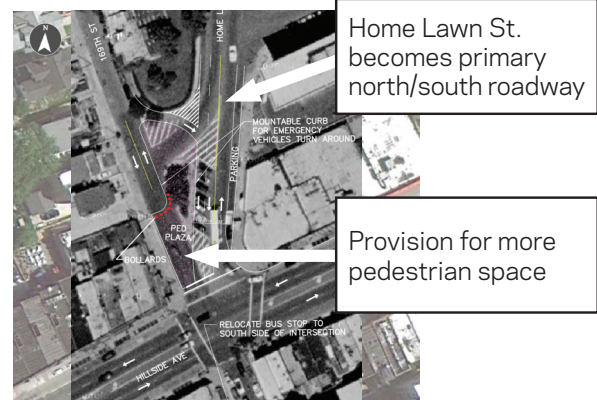
These changes will eliminate conflicts with bus layover area

Intersection Changes (Hillside Ave., Home Lawn St., & 169th St.)

Current Issues



Opportunity



Please note that the examples presented on this board show only a few of the improvements recommended for the study area.